From: Bloomberg BNA
To: Edlund, Carl

Subject: Aug. 31 -- Daily Environment Report - Afternoon Briefing

Date: Thursday, August 31, 2017 3:05:28 PM





Daily Environment Report

Afternoon Briefing - Your Preview of Today's News

The following news provides a snapshot of what Bloomberg BNA is working on today. Read the full version of all the stories in the final issue, published each night. The Bloomberg BNA Daily Environment Report is brought to you by EPA Libraries. Please note, these materials may be copyrighted and should not be forwarded outside of the U.S. EPA. If you have any questions or no longer wish to receive these messages, please contact Josue Rivera-Olds at rivera-olds.iosue@epa.gov, 202-566-1558.

Under Water, Houston Superfund Sites Spread Unease

Posted August 31, 2017, 12:35 P.M. ET

By Sylvia Carignan

At two Superfund sites in Houston, contaminants have likely spread outside secured perimeters, into communities and bodies of water, community advocates said.

"There are these massive pools of water sitting on the actual site," said Yvette Arellano, spokeswoman for Texas Environmental Justice Advocacy Services, which is tracking progress at the Many Diversified Interests Inc. Superfund site in Houston. Arellano and other community advocates worry that lead-contaminated soil has mixed with floodwater at the site.

The Environmental Protection Agency is taking stock of flooded Superfund sites in the aftermath of Hurricane Harvey, but community groups worry that the agency's cleanup policies aren't enough to protect human health.

The EPA started assessing storm damage at affected Superfund sites Aug. 30, but has not specified which properties it has reviewed. There are 13 federal Superfund sites in Harris County, Texas, which includes the city of Houston. The San Jacinto River Waste Pits Superfund site outside Houston has impounded paper-mill waste. In the early 2000s, the Texas Commission on Environmental Quality found dioxins and furans in sediment, fish, and crabs.

"The original way they found out the pits were leaking was through a similar storm many years ago," Lois Gibbs, founder of Center for Health, Environment & Justice, told Bloomberg BNA, adding that "the dioxin washed up into the properties there."

The EPA's proposed remediation plan for the site acknowledges the potential for flooding and changes in the river's path, making containment options unreliable. An armored cap placed on

some of the waste in 2011 has been deteriorating, even with periodic repairs.

The San Jacinto River site is one of nine where EPA Administrator Scott Pruitt will decide on the final remedial plan. The proposed plan, to ultimately remove the contaminants from the site, was estimated to cost nearly \$100 million.

Harvey's Floods Could Delay 10 Percent of U.S. Fracking: Analyst

Posted August 31, 2017, 12:31 P.M. ET

By David Wethe

As much as 10 percent of U.S. fracking work could be delayed after Hurricane Harvey ripped through southeast Texas, home to one of the nation's busiest oilfields, according to Raymond James & Associates financial advisory.

More than half the rigs running in the Eagle Ford Shale are estimated to have suspended drilling because of the storm, Marshall Adkins, an analyst at Raymond James, wrote in an Aug. 31 note to clients. The muddy conditions left in Harvey's wake will add stress to the fracking services sector that has consistently lagged the faster drilling crews.

Given its location in far southeastern Texas, the Eagle Ford was the only major American shale formation in the cross hairs of Harvey when it slammed ashore as a Category 4 hurricane last week. Major explorers including EOG Resources Inc. and Marathon Oil Corp. halted drilling and evacuated crews in anticipation of the storm, crimping as much as 57 percent of daily production, according to the Texas Railroad Commission.

"Given that much of oil and gas activity occurs in areas only accessible via dirt roads, the heavy rainfall usually makes the movement of trucks and supplies much more difficult," Adkins wrote. "The trucking and rail of sand, chemicals, and personnel to the well site will all take more time given the likely nasty condition of many Eagle Ford access roads."

The Eagle Ford was the only shale basin of the big four to drop activity in recent days, as some in the industry start to look at shale as a more expensive option compared to other places.

The temporary drop in the rig count by as much as 45 rigs due to flooding could be a catalyst for higher oil prices, Adkins wrote.

©2017 Bloomberg L.P. All rights reserved. Used with permission

Concerns Over Houston Landfills Rise as Floodwaters Recede

Posted August 31, 2017, 02:50 P.M. ET

By Adam Allington

Tens of thousands of hurricane-ravaged houses will be gutted or bulldozed when the floodwaters in Texas eventually recede and cleanup begins. Where all of that garbage ends up is a looming question, with potential long-term environmental consequences.

While state officials say it is still too early to determine how much debris will remain, they know that in the aftermath of Hurricane Katrina in 2005, the city of New Orleans—which is one-sixth the size of Houston—had to dispose of 55 million cubic yards of waste, enough to fill the Superdome 40 times over. Simple math indicates that the size and scope of the Houston cleanup will be much greater, raising questions about whether area landfills are equipped to sort

and dispose of that much garbage.

Toxic Waste Headed to Landfills

In the aftermath of a hurricane, getting people safely back into their homes is the first priority. In an effort to speed that process, the Texas Commission on Environmental Quality has waived certain environmental regulations, including several pertaining to the <u>disposal of solid waste</u>.

According to the federal Resource Conservation and Recovery Act, all debris headed to landfills first must be sorted into five categories: woody debris; construction and demolition debris; "white goods," such as refrigerators, air conditioners, and water heaters; household hazardous waste; and electronic waste.

Many environmentalists worry that with thousands of truckloads of debris coming in such a rapid succession, sorting won't actually happen to the extent it should.

"We're about to put hundreds of thousands of tons of toxic materials into landfills," Andrew Dobbs, program director with the Texas Campaign for the Environment, told Bloomberg BNA. "Based on what we've seen from other recent floods in Texas, they probably aren't going to segregate out toxic materials, it's just going to end up in the landfill."

Dobbs said he and other environmentalists are not wagging their fingers at people who want the cleanup to go as quickly as possible. Instead, he says Houston should use this as an opportunity to plan for the next disaster, and properly prioritize hazardous waste cleanup.

A Very Long Cleanup

The trash and debris Harvey will leave behind is likely to take years to clean up, according to the Federal Emergency Management Agency. If disasters such as Harvey become more frequent, as <u>climate scientists say they will</u>, landfills will become increasingly important to the recovery process.

In the case of Houston, a lack of space in landfills might not be the immediate concern. The Houston-Galveston region has 27 landfills, with a total of 34 years of capacity under normal disposal rates, according to the Houston-Galveston Area Council.

"As things dry out, most cities and counties do have disaster debris management programs in place," Anne Germain, director of waste and recycling technology at the National Waste and Recycling Association, told Bloomberg BNA.

With the full cleanup likely to take a long time, the impact to neighborhoods could be minimized by having the material removed and managed at temporary locations, like the ones used in the aftermath of Katrina, Germain said.

Construction and demolition (C and D) landfills, so-called "sticks and bricks" sites, for example, could be used to take on extra capacity that might otherwise end up in municipal solid waste landfills.

"For instance, there will be lots of cars," Germain said. "Cars don't normally go to landfills, but they could be stored and processed at one off-site location.

Typically, the liner requirements for C and D landfills are not as robust to protect groundwater and each state regulates what materials those landfills can accept.

In Texas, Germain said, small amounts of household hazardous waste such as compact

fluorescent light bulbs and batteries are permitted to go into the regular municipal solid waste landfill. More hazardous materials like propane tanks, pesticide containers, and household cleaners will need to be separated and taken to special disposal sites.

Lessons From Katrina

One of the factors contributing to the lengthy cleanup process after Katrina was the unprecedented scale of the operation and the complexity of the waste stream. Lessons learned from that cleanup have become integral to other disaster recovery plans.

"We authorized 409 sites for debris management—things like storage, grinding up waste to reduce volume," Chuck Carr Brown, the secretary of the Louisiana Department of Environmental Quality, told Bloomberg BNA. Brown was the assistant secretary during Hurricane Katrina and said he has shared his post-disaster playbook with his counterparts in Texas

His main piece of advice for Texas was to distribute the waste and debris segregation protocols as quickly as possible.

"Once the water recedes, the first thing you'll have is folks will go back home and start gutting houses—sheet rock, carpet, refrigerator, it will all go out to the curb," he said.

Brown told Bloomberg BNA that the list of materials that could be dumped in landfills was expanded in the aftermath of Katrina, but residents have not been exposed to a greater risk of point-source pollution.

"We didn't relax environmental" regulations, Brown said. "However, we did use a common sense approach to questions like, 'How can we create additional landfill space?"

Louisiana extended the kinds of materials that could be taken to C and D landfills to include things like carpet and furniture, which frequently include chemicals and plastics, Brown said.

Synthetic carpets biodegrade very slowly and are known contributor to methane emissions. They can leach dangerous chemicals into the water supply, according to the anti-incineration group GAIA.

Brown said that waste collected during the Katrina cleanup is still being tested and has not been a problem. "We're 12 years out and not one environmental issue," he said.

He also said New Orleans was able to recycle 39 percent of the debris the city collected.

"If the people in Houston are able to do that, they'll be fine."

U.S. East Coast Drivers to Feel Harvey Fury at Gasoline Pump

Posted August 31, 2017, 02:15 P.M. ET

By Laura Blewitt

Motorists from Maine to Florida will soon feel the wrath of Hurricane Harvey without seeing a single raindrop.

Fuel prices at the pump are likely to climb after Colonial Pipeline Co.—the largest U.S. gasoline conduit—was forced to shut parts of its main diesel line late Aug. 30 and planned to halt a portion of its gasoline line Aug. 31 because about half of Gulf Coast refining capacity was offline. The company anticipates resuming some service late Sept. 3. Valero Energy Corp. and Royal

Dutch Shell Plc, both major Gulf Coast refiners, told wholesale customers Aug. 30 they don't have enough gasoline and diesel to sell retail suppliers.

"It's one thing to not have refiners," Dan McTeague, an analyst at <u>GasBuddy.com</u>, a company which tracks retail prices and availability, said by phone. "It's quite another thing to not have pipelines."

Hurricane Harvey has potentially cut U.S. fuel-making capacity to the lowest level since 2008 after its initial strike on the Texas coast late last week. As Tropical Storm Harvey hit southeast Louisiana on Aug. 30, it brought torrential rains that shut the biggest U.S. refinery, owned by Motiva Enterprises LLC in Port Arthur, Texas, and one nearby held by Total SA. They join more than 12 other plants with almost a quarter of U.S. refining capacity.

As refineries along the Gulf Coast turned off the lights, Colonial, which carries fuel from Gulf Coast refineries to the East Coast, indicated that portions of its two main Lines 1 and 2 west of Lake Charles, Louisiana, would be offline and operating at reduced rates east of Lake Charles. Many smaller lines branching off from its main artery are also likely to shut.

Pace of Supply

"The issue is the pace of supply that we're getting from the origins," Buster Brown, Colonial's director of scheduling, said in a telephone interview. "It's not as much running out of supply as the timing—the speed at which supply gets to market."

Once shipments from the Houston area resume, Colonial will be able to ship fuels east, bypassing shuttered terminals in the Port Arthur, Texas, area, Brown said, noting that "Houston supply and Port Arthur supply are independent, so to speak."

Harvey also submerged pump stations and terminals along the Gulf Coast with its days-long deluge, and operators such as Valero and Shell had no choice but to stop sending fuels.

Valero stopped supplying gasoline stations across the Northeast at stores that don't carry its logo, while Shell reduced supplies to some company-branded stations in the lower Atlantic, according to people familiar with the operations of both companies who asked not to be identified. Motiva Enterprises holds exclusive rights to distribute Shell fuels to the majority of the southeast, said Natalie Gunnell, a spokeswoman for Shell's U.S. products unit.

BP Plc was said to be moving a tanker authorized to carry fuels between U.S. ports to Florida from New York Harbor, according to a person familiar with the cargo.

Spokespeople from Valero and BP didn't return requests for comment.

Fuel Waivers

The Environmental Protection Agency, in an effort to stay ahead of potential shortages, has been issuing waivers exempting more and more southeastern states from requirements that they use fuel that meets clean-air quality standards.

Gasoline futures for September delivery at New York Harbor rose for an eighth session Aug. 31, the longest rally since 2013, and climbed above \$2 a gallon.

As shortages ripple across the East Coast, the most likely suppliers left standing are refiners from Louisiana and Europe, according to Zachary Rogers, a refining and oil products analyst at Wood Mackenzie. The ongoing gasoline supply issues could reduce East Coast inventories to 3-to 5-year lows, he said by phone from Houston.

At least 20 tankers were booked to load European fuels for the U.S. since Harvey made landfall, a rate nearly double the average for August, shipping data compiled by Bloomberg show. Shipbrokers said cargo flows to New York are expected to be the highest since November, when Colonial Pipeline exploded and cut off supplies.

"Because of the shortage, you will likely see a price increase in the East Coast, which would incentivize the other refiners to shift gasoline yields," Rogers said.

While suppliers of gasoline stations from Georgia northward may have reason to be concerned, the Sunshine State has one key advantage: It's not winter yet.

"In Florida, we're not in the main season, so demand is not as high as it would be normally from November to May," said Ned Boman, executive director of the Florida Petroleum Marketers and Convenience Store Association. "We should be OK."

--With assistance from Bert Gilbert.

©2017 Bloomberg L.P. All rights reserved. Used with permission

Arkema Chemical Plant in Texas Explodes After Hurricane Damage

Posted August 31, 2017, 9:46 A.M. ET

By Ania Nussbaum and Jack Kaskey

A Texas chemical plant was hit by explosions after floods caused by Hurricane Harvey knocked out power supplies needed to refrigerate volatile chemicals. The plant, owned by French chemical company Arkema SA, was evacuated and the local area cleared prior to the blow.

Two explosions and black smoke were reported at 2:00 a.m. local time, after the plant in Crosby, Texas, lost its electricity supply and backup generators, the company said in an Aug. 31 statement. Arkema stores organic peroxides at several locations on the site and the threat of additional explosions remains, it said.

"It is not anything toxic. It is not anything we think is a danger to the community at all," Harris County Sheriff Ed Gonzales said in a press conference streamed on the internet Aug. 31. Harvey made landfall on Aug. 26 and has brought torrential rain and the collapse of levees, dams and drains while knocking out almost a quarter of U.S. refining capacity, of which more than half is in the Gulf of Mexico region. While Harvey's closure of U.S. crude processing capacity has grabbed headlines and led to spiking gasoline prices, less known is the storm's outsize impact on chemical production.

"It seems like Harvey came with a plan to follow the chemical industry on the Gulf Coast," said Sam Mannan, director of the Mary Kay O'Connor Process Safety Center at Texas A&M University. "This whole thing is testing how well we have thought through our safety systems and programs and how robust the plants are."

Uncharted Territory

About 61 percent of U.S. ethylene production has been shut due to Harvey as of Aug. 30 afternoon, according to PetroChemwire.

While Gulf Coast chemical plants are designed to withstand hurricane force winds and floods, Harvey has put the industry into uncharted territory, according to Mannan.

"I don't know if anybody is ready for this level of flooding," he said. Arkema's site in Crosby, which is about 25 miles from downtown Houston, is situated in an area with no hospitals, schools, correctional facilities, recreational areas, or industrial and commercial areas in the vicinity, according to the Colombes, France-based company.

The best course of action is to let the fire burn itself out, it said. The chemicals made at the plant are used in a variety of products from drugs to construction materials.

"At Crosby, we prepared for what we recognized could be a worst-case scenario," Rich Rowe, who overseas Arkema's U.S. operation, said in a statement. "We had redundant contingency plans in place. Right now, we have an unprecedented six feet of water at the plant."

One complicating factor post-Harvey is the urban sprawl gradually engulfing chemical plants, according to Andrea Sella, a professor of inorganic chemistry at UCL university in London.

"Because accidents are unusual, planners can come to underestimate the severity of what are likely to be quite rare events," she said in an e-mailed statement.

-With assistance from Jessica Shankleman.

©2017 Bloomberg L.P. All rights reserved. Used with permission

Texas Explosions Signal Chemical Plants Pushed to Limits by Storm

Posted August 31, 2017, 12:28 P.M. ET

By Jack Kaskey and Ania Nussbaum

In its devastatingly slow crawl up the industrial Gulf Coast, Hurricane Harvey is proving to be the biggest test yet of the safety and vulnerabilities of the U.S. chemicals industry.

A Houston-area chemical plant was hit by explosions overnight after floods caused by Harvey knocked out power supplies needed to refrigerate volatile peroxides. Fifteen police officers were treated at the hospital for smoke irritation from the plant, though earlier evacuations of the site and surrounding community prevented more serious injuries. The plant is owned by French chemical company Arkema SA.

The remaining chemicals will eventually burn, Richard Rennard, an Arkema division president, told reporters Aug. 31. "It is not anything we think is a danger to the community at all," Harris County Sheriff Ed Gonzalez said in a news conference early in the day.

The incident underscored the risks confronting the industry after dozens of chemical plants shut down in the path of the storm from South Texas to Louisiana, knocking out more than half of U.S. production of some of the most-used chemicals and plastics.

With its crucial access to ports for shipping and receiving, the Gulf Coast is the epicenter of the nation's chemical industry, where many of the materials indispensable to modern society are produced. The plants provide the basic building blocks for making everything from cars and computers to household furnishings and appliances.

The massive industrial centers also deal with complex chemical processes that pose hazards from lethal explosions to toxic spills when things go wrong. The danger is greatest when plants are shutting down and starting up.

"That is when bad things happen," said Ramanan Krishnamoorti, the chief energy officer at the University of Houston.

Uncharted Territory

Gulf Coast chemical plants are designed to withstand hurricane force winds and floods, but Harvey has put the industry into uncharted territory, Sam Mannan, director of the Mary Kay O'Connor Process Safety Center at Texas A&M University, which studies plant safety.

Though plants have been dealing with a multitude of problems and there have been no serious injuries, the crisis is far from over. It will take weeks, if not months, for all the plants to assess damage, make repairs and restart operations in the wake of the floods.

"This whole thing is testing how well we have thought through our safety systems and programs and how robust the plants are," said Mannan. "I don't know if anybody is ready for this level of flooding."

Harvey made landfall on Aug. 26 and has brought torrential rain and historic flooding along the Gulf Coast, knocking out almost a quarter of U.S. refining capacity. While Harvey's shut down of U.S. crude processing capacity has grabbed headlines and led to spiking gasoline prices, less known is the storm's outsize impact on chemical production.

"It seems like Harvey came with a plan to follow the chemical industry on the Gulf Coast," Mannan said.

Production Halted

About 61 percent of U.S. ethylene production has been shut due to Harvey, according to PetroChemwire. The storm has closed about 51 percent of U.S. capacity for making polyethylene, the world's most used plastic resin, according to Kevin McCarthy, an equity analyst at Vertical Research Partners. As much as 65 percent of polypropylene production and one-third of chlorine output may shut or running at reduced rates, according to IHS Markit. Prices already have been rising.

"The combination of Harvey's path, duration and rainfall total is wreaking havoc with the supply side of the U.S. chemicals industry on an unprecedented scale," McCarthy said. "We certainly haven't seen anything quite like it in our 18 years of following chemical stocks on Wall Street."

One complicating factor post-Harvey is the urban sprawl gradually engulfing chemical plants, according to Andrea Sella, a professor of inorganic chemistry at UCL university in London. "Because accidents are unusual, planners can come to underestimate the severity of what are likely to be quite rare events," he said by email.

Arkema's site in Crosby, which is about 25 miles from downtown Houston, is situated in an area with no hospitals, schools, correctional facilities, recreational areas or industrial and commercial areas in the vicinity, according to the Colombes, France-based company.

Explosions, Smoke

Two explosions and black smoke were reported at 2 a.m. local time, after the plant lost power and backup generators in the storm's flood, the company said in a statement on Thursday. Arkema stores organic peroxides at several locations on the site. Sheriff Gonzalez said 13 of the 15 deputies treated for smoke exposure had been released from the hospital.

The best course of action is to let the fire burn itself out, the company said. The chemicals made

at the plant are used to make plastics.

"At Crosby, we prepared for what we recognized could be a worst-case scenario," Rich Rowe, who overseas Arkema's U.S. operations, said in a statement. "We had redundant contingency plans in place." The flood waters, which reached 6 feet inside the plant, have begun to recede, Rennard, the company president, said Aug. 31.

—With assistance from Jessica Shankleman.

©2017 Bloomberg L.P. All rights reserved. Used with permission

Harvey Cleanup Tests Trump's Plan to Shrink EPA Staff by 8%

Posted August 31, 2017, 12:24 P.M. ET

By Abby Smith

The EPA has a team in Texas to lead the environmental response to Hurricane Harvey, which could pose a severe test for an agency the Trump administration is moving to shrink as early as this weekend.

The hurricane struck as the Environmental Protection Agency could buy out as many as 1,228 employees, or roughly 8 percent of its workforce.

"I've got to hope there has been a sudden and drastic culture change within the agency, and the political appointees from [EPA Administrator Scott] Pruitt down I hope and pray are listening to the EPA career staff," Judith Enck, who served as EPA Region 2 administrator during the Obama administration, told Bloomberg BNA. Enck led the agency's response to Hurricane Sandy, which swept across the Northeast in 2012 leaving areas of the New York and New Jersey coastline devastated.

The Trump administration's plans to shrink EPA staff pose a significant concern to the agency's Harvey response, she said. The first round of early buyouts for staff is Sept. 2.

"If a large number of EPA staff are walking out the door then, that is a huge problem," Enck said, suggesting the EPA should freeze that round of buyouts.

"The Trump administration wants to cut the EPA budget by 31 percent. Imagine responding to the current situation with only two-thirds of the staff on board," she said, adding that the people who would be leaving due to buyouts are the "ones most experienced, the people who worked on the Katrina and Sandy responses."

The Category 4 storm that ripped through the Houston area late last week and is now making its way through southeast Texas and Louisiana has caused historic flooding, but it is also leaving behind environmental hazards—from flood waters littered with chemicals, sewage, bacteria, and debris to large releases of toxic gas and pollutants into the air from the heavy concentration of refineries and chemical plants in the area.

While the Federal Emergency Management Agency serves as the lead agency in emergency response, the EPA will work to address environmental threats caused by the storm—a recovery effort that is likely to take months, if not years.

EPA Teams in Texas

To respond to Harvey, the EPA has activated its Emergency Operations Center, as well as the

National Incident Management Team composed of response personnel from EPA Regions 3, 4, and 5. That team arrived in Dallas on Aug. 30, according to David Gray, acting deputy regional administrator for EPA Region 6, which covers Texas and Louisiana.

"EPA has an organized emergency response program and is positioned to support FEMA, state, local and tribal partners," Gray said in a statement to Bloomberg BNA. "Helping to manage response efforts and focusing on the safety of those affected are our highest priorities."

Typically, the EPA serves as the lead agency for cleanup of hazardous materials in the aftermath of an environmental disaster, though it also coordinates with other federal and local agencies to assess and respond to other potential environmental impacts.

Gray said the EPA is working with the Texas Commission on Environmental Quality, Texas General Land Office, and the Coast Guard, with seven teams in the field. The EPA Aug. 30 sent teams to inspect two Superfund sites near Corpus Christi that are on the agency's National Priorities List, according to Gray. The agency will also send teams to two drinking water and waste water systems, as well as aircraft to assess pollution in the impacted area.

In June, the union covering EPA employees said as many as 1,228 EPA employees would be eligible for buyout offers that would need to take effect by Sept. 2.

Fate of Chemical Makers' Trade Secrets Rests With EPA

Posted August 31, 2017, 7:31 A.M. ET

By Pat Rizzuto

The EPA is preparing to receive requests from potentially hundreds of chemical manufacturers, importers, and processors who want to keep thousands of chemical details out of the public eye.

However, with a looming Sept. 19 deadline for companies to justify past requests to the EPA, a sense of confusion remains over what companies need to do to keep their trade secrets confidential, according to industry officials and consultants. That confusion is the result of a complex web of deadlines and requirements for different types of information and some initial missteps following the 2016 update to the nation's chemicals law.

At issue is confidential business information, facts such as a company's identity as the manufacturer of a chemical, which could be mined by competitors to gain market share.

"Protection of confidential business information is critical to enable innovation," Jarrod Erpelding, a Dow Chemical Co. spokesman, told Bloomberg BNA.

Chemical companies frequently ask the EPA to keep some details about chemicals private. The 2016 update to the Toxic Substances Control Act added a new requirement that manufacturers routinely justify their need for that chemical information to be kept confidential.

Three 'Buckets'

The statute requires the EPA to review all claims that a chemical's identity should be kept confidential and 25 percent of any other proprietary business information claims.

The updated chemicals law, along with a Jan. 19 Federal Register <u>notice</u> and an Aug. 11 <u>rule</u> (RIN 2070-AK24), established three general groups, or "buckets," of CBI claims the EPA must review, Richard Engler, a senior chemist with Bergeson & Campbell, P.C. and 17-year veteran of the EPA chemicals office, told Bloomberg BNA.

Those "buckets" of claims are:

- "retrospective substantiations" for claims that companies made on TSCA documents submitted between June 22, 2016, when the law was updated, and March 21, 2017, when the EPA issued guidance;
- ongoing substantiations that provided a company's rationale to keep confidential information on any TSCA document filed since March 21; and
- justifications for CBI claims made in response to an August regulation known as the "Inventory Reset" rule, which requires chemical manufacturers and importers, and allows chemical processors to, notify the EPA about any chemical they made or used since June 21, 2006. Those submissions are due by Feb. 7, 2018.

Confidential business information isn't just a big issue for chemical companies. Environmental advocates say that workers, industrial hygienists, ecologists, state and environmental officials, and the public generally have the right to know about chemicals that are in people's bodies and the environment. The ability to figure out whether that exposure could cause harm depends on chemical information being publicly available, they said.

The Environmental Defense Fund and Safer Chemicals Healthy Families were unable to respond to a request for comment on the EPA's review of confidential business information claims, while the Natural Resources Defense Council didn't reply to repeated requests. In a Jan. 18 blog, Richard Dension, lead senior scientist with the Environmental Defense Fund, described the EPA's decision to give chemical companies until Sept. 19 to substantiate previously submitted confidential business information claims as "exceedingly generous."

EPA Prepping for Deluge

The most imminent deadline companies face is the Sept. 19 deadline for justifying claims made in the nine months after TSCA was updated. A single TSCA document filed during that period could include multiple CBI claims.

The universe of claims companies made during those nine months could include thousands of requests stemming from the Chemical Data Reporting rule submissions they submitted to the EPA in 2016. Bloomberg BNA reviewed 43,095 submissions from last year: 6,554 of them, or about 15.2 percent, came from manufacturing sites claiming their identity as confidential.

Realizing a deluge of confidential business information justifications may be submitted by that deadline, the EPA boosted by 20 percent the number of staff that will review company claims, Pam Myrick, director of the chemical office's Information Management Division, told Bloomberg BNA. The agency may seek additional, temporary help due to the volume expected, she said.

The amended chemicals law gives the EPA 90 days to complete its reviews of confidential business information claims.

"We will do our best," Ryan Wallace, acting information access chief of the Information Management Division in the EPA chemicals office, told Bloomberg BNA.

If a company fails to substantiate information it claimed needed trade secret protection, the agency will notify the company. The business have 30 additional days to substantiate the information, he said. The agency also will provide its final decisions and the rationale behind them to companies, which would then have 30 days to appeal that decision in a U.S. district court, Wallace said.

That 30 day time limit to sue means chemical manufacturers must take seriously any letter they receive from the agency and decide promptly if they want to challenge it, Irene Hantman, an attorney in the Washington office of Verdant Law, PLLC, told Bloomberg BNA. If not, the company loses its ability to prevent the information from being made public, she said.

Confusing Context

With just weeks to go before the Sept. 19 deadline, some chemical makers don't realize how many confidentiality claims may need to be substantiated, or re-substantiated, because they were made during the June 2016 to March 2017 window, Brianna Scherffius, a consultant with Ramboll Environ, Inc., and other chemical policy professionals told Bloomberg BNA.

Companies submitted thousands of Chemical Data Reporting rule forms—each form having many potentially confidential details—from June 1 through Oct. 31, 2016. Confidential business information claims also could have been made between June 22, 2016, and March 21, 2017, on:

- new chemical notices and related documents (TSCA Section 5);
- substantial risk notices (TSCA Section 8(e)); and
- documents such as chemical information submitted due to a rule or enforceable consent agreement (TSCA Section 4).

The context in which these claims were filed makes them particularly complex and potentially confusing for chemical manufacturers, Scherffius and Christina Franz, senior director of regulatory and technical affairs at the American Chemistry Council, told Bloomberg BNA.

The requirement to justify confidentiality claims was effective as soon as the TSCA amendments became law in June 2016. Yet, the electronic database companies use to submit chemical information to the EPA wasn't updated for several months, Scherffius, Franz, and Wallace said.

The delay meant the software companies use didn't automatically trigger the substantiation requirement for many confidentiality claims they could make.

It also took the EPA until January to prepare guidance to help companies substantiate confidentiality requests, Wallace said. The EPA had developed guidance and updated its electronic filing system by Jan. 19 when it <u>announced</u> the retrospective substantiation window, he said.

Mistakes Made Early On

Prior to that January guidance, companies had some painful experiences with confidential business information requests.

Chemical manufacturers were getting letters "fast and furious" from the EPA saying confidential information had not been adequately substantiated, yet those letters weren't clear about what the agency needed, Franz said.

In at least one case, a company's CBI was unintentionally disclosed, Franz said. The company's competitive position wasn't harmed as a result of that disclosure, Franz said, but the EPA took the security breach seriously.

"We were making mistakes in the haste to get them [the letters] out," Wallace said.

After chemical manufacturers alerted officials to the problems, the agency temporarily stopped sending letters saying claims had not been sufficiently substantiated, Wallace said. The EPA focused on setting up a clearer review and communication process and developing guidance, he added.

Those efforts included regular meetings between EPA and the American Chemistry Council to ensure that companies understand the agency's expectations, Franz said. In addition the EPA hosted two webinars in March on its updated electronic filing system and had agency staff speak during Chemistry Council webinars this summer to further explain expectations and the law's requirements.

"During the start-up of EPA's CBI review program, many companies, including Dow, encountered errors," Erpelding told Bloomberg BNA by email. "The agency responded, and appears to have resolved those issues."

Lack of Awareness Persists

Notwithstanding the EPA's "very constructive" efforts to clarify its expectations, some chemical manufacturers still don't realize they have to substantiate or re-substantiate confidentiality claims made soon after TSCA was amended. Franz said.

The EPA developed three CBI substantiation templates to help companies understand what information can be claimed confidential and what questions they would be able to answer to explain why.

Yet, Scherffius said, some chemical manufacturers do not know these templates exist or understand how to substantiate their claims.

Nor do manufacturers fully realize different substantiation requirements may or may not apply to different types of claims, Engler said.

The amended chemicals law presumes certain types of information to be confidential, which means companies don't have to justify the need to keep that information confidential when its provided to the EPA, Engler said. That includes information like a company's suppliers and customers, as well as the specific ingredients and percentage of those ingredients in chemical mixtures is confidential.

More Justifications Possible

There's another reason the EPA may contact a chemical manufacturer or processor and ask it to justify a confidential business information claim—if a Freedom of Information Act (FOIA) request seeks a document that contains protected information.

The EPA could ask the company to clarify inconsistencies about the amount of information that needs to be protected, the agency said. For example, if a manufacturer claimed its identity as confidential, but failed to claim its address too, the EPA would ask whether it sought protection for all aspects of its identity, the agency said.

"In general however, EPA only protects information that is claimed as CBI," it said.

FOIA-triggered confidential business reviews do not count toward the 25 percent of examinations TSCA requires the EPA to make, the agency told Bloomberg BNA.

Companies only have 10 days to challenge an EPA determination on CBI triggered by a

Freedom of Information Act request, according to Hantman, who has handled such substantiation requests for clients.

EPA Notices Common Problems

EPA's Wallace and Myrick discussed common problems staff have observed as they've reviewed substantiations. Primarily they referred to problems that arise when companies claim the specific identity of a chemical to be a trade secret.

Chemical companies are allowed to keep a chemical's identity secret in some circumstances. For example, if it's a new molecule that a company spent thousands of dollars developing. In such cases, the updated TSCA directs companies to use a "structurally descriptive generic name" for public documents about the chemical.

One mistake some companies have made is claiming that a specific chemical's identity needs to be kept confidential, even though that information is already available to the public via a safety data sheet posted on the company's website, Wallace said.

"We've encouraged industry to contact staff with questions," Wallace said. Often, when companies do, they realize they don't need the agency to keep certain information out of the public eye, he said.

Industry representatives told Bloomberg BNA that another common problem is that companies are sometimes asking the EPA to shield their identity as a manufacturer of a specific chemical, but forgetting to claim its address or the name of its "technical contact" as confidential information. Internet searches can easily link the address or technical contact with the manufacturer.

Companies Urged to Provide Facts

Franz encouraged chemical makers to look at the EPA's CBI substantiation templates, frequently asked questions, and <u>other information</u> it has prepared.

Companies will have to provide facts and a clear rationale to show the agency why its release of confidential business information would harm them financially, she said.

"Companies need to help EPA understand, so it will make an educated decision," Franz said.

Information that could help the EPA decide trade secret protection was warranted could include details showing that one company is the only business to have discovered a particular use for a chemical. For example, if a processor discovered that a chemical not known for being used in a particular type of formulation—like a paint, floor wax, or cleaner—was useful, the company might want to keep its use of that chemical confidential.

Too often, Scherffius said, CBI justifications are a last minute effort as a company finishes providing technical details on another TSCA form.

"Companies do not understand how to fill out the CBI form and the fact that this is their opportunity to support why each piece of data needs to be maintained as confidential," she said.

Chemical Identity

One thing companies won't need to worry about yet is justifying their need for continued CBI protection for the specific identity of chemicals on the agency's confidential TSCA inventory. Those types of claims need not be substantiated now, Engler said.

Amended TSCA requires the EPA to propose a "review plan" rule describing the process it will use to review companies' assertions that an existing chemical's specific identity must continue to be kept secret, he said. Once that plan is released, which could happen in 2019, the EPA would have five years to review all claims companies make to keep a chemical's specific identity confidential.

Given all the other statutory deadlines the agency faces, it may be a few years before the EPA begins to require and review chemical identity substantiations, Engler said.

Judge With 'Healthy Skepticism' of Regulation Exits D.C. Circuit

Posted August 31, 2017, 7:45 A.M. ET

By Rebecca Wilhelm

The nation's second-most-powerful court is losing a "unique" voice that is skeptical of administrative agency power, with Judge Janice Rogers Brown set to retire Aug. 31 after 12 years serving on the U.S. Court of Appeals for the District of Columbia Circuit.

Brown's retirement hands President Donald Trump his first opportunity to fill a seat on the court, which frequently hears administrative law cases, including challenges to EPA regulations.

While Brown generally votes with the conservative bloc, she often reaches the same outcome in a different way from her conservative colleagues, Christopher J. Walker, an associate professor of law at The Ohio State University Moritz College of Law, told Bloomberg BNA.

"When you're just counting votes on the D.C. Circuit, you might not see much of a difference" after Trump appoints Brown's replacement, Walker said. "But when you're looking at the reasoning that's given, I doubt you'll have a judge like Janice Rogers Brown, with that kind of libertarian bent."

Walker said in that respect, she's comparable to Supreme Court Justice Clarence Thomas: they might reach the same conclusion as their conservative colleagues, but for different reasons.

'Healthy Skepticism'

Former President George W. Bush first nominated Brown to the federal judiciary in 2003, but she wasn't confirmed until 2005 because of opposition from Senate Democrats.

Originally from Alabama, Brown previously served as an associate justice of the California Supreme Court. She received her juris doctorate from UCLA School of Law and her master of laws from the University of Virginia School of Law.

Brown has a "healthy skepticism of the administrative state," Walker said. She falls within the libertarian camp that believes courts should more aggressively review government action.

The D.C. Circuit declined to make Brown available for an interview. However, the opinions she has authored illustrate her skepticism of certain agency actions, including those of the EPA.

In 2009, the D.C. Circuit denied a petition seeking review of a Drug Enforcement Agency order revoking a company's authority to distribute certain chemical products under the Controlled Substances Act. Brown dissented from that decision.

"I close with a few words on how easily the administrative state can slip its leash," Brown wrote

in Novelty, Inc. v. DEA.

"A familiar argument for enhanced administrative authority (and hence diminished judicial review) is the need for 'flexibility,' as old-fashioned courts are ill-suited to deal with the complexities of the modern world," Brown wrote. "That may be true. But the flipside of flexibility is certainty, consistency, evenhandedness, and predictability—those Rule of Law values that mark a free society."

Jonathan H. Adler, a professor of law at Case Western Reserve University School of Law, told Bloomberg BNA: "Judge Brown is more openly skeptical of assertions of agency power than most judges are and certainly has a distinct voice in that regard."

Not Subject to Judicial Review

But Brown doesn't always think that an agency's action is judicially reviewable.

In <u>Clean Air Council v. Pruitt</u>, the D.C. Circuit recently rebuked the Environmental Protection Agency for suspending methane emissions regulations imposed under the Obama administration. The court held that the EPA decision to stay enforcement of the Clean Air Act rule for three months while the agency reconsidered it was unauthorized and unreasonable.

Brown dissented, arguing that the court lacked jurisdiction to hear the case because the EPA decision wasn't final agency action subject to judicial review.

"That Petitioners are anxious to see their victory implemented and impatient with delay does not make EPA's action final," she wrote. "It may be annoying, disappointing, ill-advised, even unlawful, but that does not transform a stay to facilitate reconsideration into 'final agency action.'

'Unique Perspective'

"Judge Brown has a unique perspective on things," Aaron Nielson, an associate professor of law at J. Reuben Clark Law School at Brigham Young University, told Bloomberg BNA. "She comes from a distinct place and brings a deep fountain of knowledge to these cases that isn't the same background and knowledge that a lot of other judges have."

She's wary of federal agency overreach and is very mindful of things like how much something costs and who's paying for it, said Nielson, who clerked for Brown. "She is in D.C., but not of D.C."

Brown also is concerned about retroactivity, according to Nielson. "She doesn't think it's fair to change the rules in the middle of the game," he said.

She authored the majority opinion in <u>Arkema Inc. v. EPA</u>, which found an EPA rule modifying the cap-and-trade market for hydrochlorofluorocarbons "impermissibly retroactive" because it no longer included companies' inter-pollutant transfers in their baseline allowances, which were recognized under an earlier rule.

The EPA interpretation of the Clean Air Act "contradicts its past practice, narrowing the range of options and altering the legal landscape" for companies participating in the cap-and-trade market, Brown wrote. "Prospectively, the EPA can limit inter-pollutant trades to a single year and can prohibit inter-pollutant baseline transfers. But the Final Rule cannot have retroactive effect."

No Replacement Yet

Trump has not yet announced Brown's successor.

"It's possible we could get a replacement that is similarly outspoken and has similar views," Adler said, "but she certainly has a distinctive voice on the federal judiciary."

The D.C. Circuit is an important court, and Democrats in Congress could try to delay the confirmation process, Adler said. But Democrats won't be able to block the nomination on their own because the Senate moved to a 51-vote threshold for appellate court nominees in 2013.

Recently, the D.C. Circuit has "been the source of a disproportionate percentage of Supreme Court nominees," Adler said. "But I wouldn't assume that anyone he appoints is a Supreme Court short-lister."

Number of Chemicals in Products is Underestimated, EPA Says

Posted August 31, 2017, 02:26 P.M. ET

By Pat Rizzuto

The number of chemicals in products people use at home, at their worksite, and in schools is typically underestimated, an EPA exposure researcher said Aug. 31.

Anyone trying to estimate the number and concentration of chemicals in products has to go beyond safety data sheets, ingredient labels, and other listings, according to Katherine Phillips, a research chemist at the Environmental Protection Agency's National Exposure Research Laboratory. During an EPA webinar, Phillips described research the agency is doing to help regulatory staff and other decision-makers decide when a chemical has the potential to harm people or the environment.

The research is designed to help the agency address the multitude of chemicals in everyday life and answer a few central questions, like which ones should the EPA worry about? Or which ones should the agency evaluate for health and ecological risks?

There are tens of thousands of chemicals in products people spray, touch, sit on, slather on, and otherwise come into contact with.

Choosing to focus on chemicals unlikely to cause problems could waste taxpayers' and companies' money as the companies invest time and research to provide the agency with chemical use, exposure, and other data. The EPA also must analyze information from academia, unions, advocacy organizations, and other groups. Choosing chemicals that do put people's health at risk or hurt the environment could prevent disease, fish kills, and other problems that also cost people, farmers, and others harm.

The research Phillips and her colleagues are doing could influence how the agency picks chemicals and pesticides for further evaluation and regulation. For example, the research office is examining ways it can help the EPA's chemicals office determine which chemicals are priorities for risk evaluations that could lead to chemical use restrictions or other regulations.

EPA Enforcement Nominee to Start Work Ahead of Confirmation

Posted August 31, 2017, 03:48 P.M. ET

By Renee Schoof

Susan Parker Bodine, the president's pick for EPA enforcement chief, will start work at the

agency Sept. 5 ahead of her Senate confirmation vote.

Bodine will work as special counsel to the administrator on enforcement, agency spokeswoman Amy Graham said Aug. 31. Bodine is the nominee to become assistant administrator for enforcement and compliance.

The move raised questions from one advocacy group about whether the Trump administration was getting around the Senate's role to advise and consent on the agency's leadership, even temporarily.

The nonprofit group Public Employees for Environmental Responsibility said in a news release Aug. 31 that Bodine's early start "appears to fly in the face of the spirit, if not the letter, of a 2017 U.S. Supreme Court decision that the Federal Vacancies Reform Act bars unconfirmed presidential nominees from performing the duties of that office in an acting capacity or from serving as `first assistants who automatically assume acting duties.'"

Graham, asked about this, said by email, "This is a usual practice done in many administrations."

Ryan Jackson, the EPA chief of staff, told staffers in an email obtained and released by PEER that the acting head of the Office of Enforcement and Compliance Assurance, career official Larry Starfield, would remain in that role until Bodine is confirmed.

New England, Canada Strive for Deeper Greenhouse Gas Cuts

Posted August 31, 2017, 02:56 P.M. ET

By Adrianne Appel

New England and eastern Canadian provinces will lean more heavily on renewable energy, electricity conservation, and zero-emissions vehicles as they aim for deeper greenhouse gas reductions.

The governors and premiers set a goal to reduce harmful carbon emissions 35 percent to 45 percent below 1990 levels by 2030 in a <u>plan</u> they released Aug. 31.

The region easily met the previous carbon-reduction goals in 2010 and 2015, the leaders of the six New England states and five Canadian provinces said during their annual meeting on Prince Edward Island, Canada.

In order to reach the 2030 target, however, the region has to be more aggressive in reducing greenhouse gas emissions, they said.

Chemours Told to Stop Discharging Two Chemicals in N.C.

Posted August 31, 2017, 03:43 P.M. ET

By Andrew M. Ballard

North Carolina regulators are asking The Chemours Co., to stop discharging two more chemical compounds of concern into the Cape Fear River from its Fayetteville, N.C., facility.

The two compounds, both perfluoroethersulfonic acid byproducts, <u>were uncovered</u> in the company's waste stream by the U.S. Environmental Protection Agency during its investigation into the facility's discharges of GenX, a substitute for the widely used Teflon chemical

perfluorooctanoic acid (PFOA). The compounds are sometimes used to make stain resistant coatings for carpets, rain gear, fast food wrappers, and frying pans.

Sufficient exposure to PFOA has been linked to thyroid disease, high cholesterol, early signs of liver damage, and testicular and kidney cancer, among other health effects according to a 2012 paper in the journal <u>Environmental Health Perspectives</u>.

Chemours already voluntarily stopped discharging GenX due to concerns about its potential health effects. Sampling has found concentrations of GenX and three other perfluorinated compounds in the Cape Fear River—a drinking water source to tens of thousands of North Carolina residents—to have dropped since that release was stopped.

Details Sought

In addition to asking Chemours to cease discharging the two newly discovered compounds, the state Department of Environmental Quality (DEQ) said Aug. 31 that it was still demanding that the company provide it with a "complete inventory, sampling data and test results for all chemicals included in the company's waste stream." The request to stop releasing the two byproducts was made in an Aug. 29 letter sent to Chemours, the state agency said.

"DEQ is looking at all legal options including going to court to get the company to stop the discharge" of the newly discovered compounds, the agency said in its Aug. 31 announcement.

In a statement, the company said it "was made aware of these sampling results on Tuesday, Aug. 29. In response, we are now investigating the potential that these two substances are byproducts of the IXM production unit at Chemours Fayetteville manufacturing site. We are working with the North Carolina Department of Environmental Quality to understand their data and gain additional clarity regarding these samples. As we gather this additional information, we are also working to determine the appropriate next steps."

The technical name of one byproduct is perfluoro-3,6-dioxa-4-methyl-7-octene-1-sulfonic acid. The second is called ethanesulfonic acid, 2-[1-(difluoro(1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro.

Limited Funding

The announcement that the two additional chemicals of concern were found came on the same day that state lawmakers approved a bill (<u>H.B. 56</u>) that, among other things, provides \$435,000 to local utilities and the University of North Carolina at Wilmington for water testing and treatment efforts related to GenX.

Critics of the GenX provisions in the bill said it was too narrowly focused and provided insufficient funding, while supporters argued it was a necessary and immediate response to the issue.

H.B. 56, which now goes to Gov. Roy Cooper (D) for his consideration, also would lift a ban on the sale of plastic bags in three coastal counties in place since 2009, ease certain solid waste "flow control" requirements, and consolidate water quality reports, among other changes.

Harvey's Roar Rumbles Half a World Away as Propane in Asia Jumps

Posted August 31, 2017, 7:39 A.M. ET

By Ann Koh and Laura Blewitt

Asian buyers of liquefied petroleum gas are already paying for disruptions half a world away in Texas as record rainfall halted shipments of propane and butane from ports that handle more than 90 percent of U.S. exports to the region.

Marine export terminals operated by Enterprise Products Partners LP, Targa Resources Inc. and Phillips 66, all suppliers of the fuel, are shut because of closures at the Houston Ship Channel, Port of Beaumont, and Port of Freeport, according to Aug. 29 statements from the companies. Mont Belvieu, Texas, facilities belonging to Enterprise and Targa also have halted some fractionation operations, in which raw liquids are turned into products like propane and butane. There are no estimates yet for when the ports will reopen.

The U.S. Gulf Coast, home to the largest LPG storage caverns in the world, is a key global supplier, so events there can ricochet in markets around the world. As Hurricane Harvey made landfall near Corpus Christi, Texas, late last week, propane prices in Northeast Asia climbed. And as it approached the Louisiana coast before making a second strike Aug. 30 as a tropical storm, Middle Eastern producers said they're raising prices. Asian buyers, which import the fuel for heating and petrochemical production, were caught in the middle.

"Affected buyers will seek cargoes from elsewhere," said Ong Han Wee, a consultant with FGE in Singapore. "The prices jumped last Friday in Asia, just before or when the hurricane made landfall. The Middle East contract prices are also higher now, most likely because of sentiment from Harvey."

Middle Eastern producers Saudi Arabian Oil Co. and Kuwait Petroleum Corp. announced that they would increase September contract prices for propane and butane by \$40 to \$60 a metric ton amid bullish sentiment, traders said. The region's countries are the most likely alternative suppliers because they are nearest to Asia, Ong said.

While international LPG prices have soared since Harvey's landfall, propane traded at the Mont Belvieu Enterprise terminal hasn't kept pace, rising just 2 percent since Aug. 24, according to DTN Energy data. The lack of dramatic price action stateside will expand arbitrage opportunities to Asia once the exporters can finally use the Gulf Coast ports, said Peter Fasullo, co-founder at LPG consultancy En*Vantage Inc.

The U.S. is expected to export 28 million tons of propane and butane this year, half of which will go to Asian buyers in Japan, South Korea, and China, according to FGE.

But the U.S. hasn't sent a single LPG tanker from the Gulf Coast since Aug. 25, according to Bloomberg market specialist Bert Gilbert. The Ports of Houston and Freeport said they're still uncertain when they'll be able to reopen to vessel traffic.

Historic Rains

And supply concerns extend beyond the shutdown of the ports.

Cedar Bayou, a body of water just outside of the fractionation and storage hub in Mont Belvieu, recorded 51.88 inches (132 centimeters) of rain this week, setting a new record for the continental U.S., according to the <u>National Weather Service</u>.

That much water could signal weeks of trouble for the storage facilities there, Fasullo said. Underground storage of LPG uses brine ponds to pump highly salinated fluids into caverns. If heavy rains dilute the salty ponds, contamination, and containment issues that make it hard to get the fuel out of storage may occur.

Enterprise's "storage assets have remained operational," said Rick Rainey, a company spokesman in Houston. "We continue to manage our brine supplies."

But Targa's capacity to receive raw products was "negatively impacted" by flooding, according to a company <u>statement</u>.

"I don't think there's going to be any relief for many days, and if those many days turn into weeks, it could be a one- to three-week period" before normal exports resume, Fasullo said by telephone from Houston. "Propane prices could go off to the races because I think you're going to get strong storage draws when we will be able to get those export terminals up."

—With assistance from Tsuyoshi Inajima and Dan Murtaugh.

©2017 Bloomberg L.P. All rights reserved. Used with permission

Germany to Cut 2018 Onshore Wind Aid After Additions Exceed Cap

Posted August 31, 2017, 11:53 A.M. ET

By Brian Parkin

Germany will cut subsidies paid to onshore wind farm owners from January after additions surpassed an industry cap, the Bnetza power regulator said.

A record 5.03 gigawatts of new onshore wind power was added in Germany during the past 12 months, exceeding the gigawatt 3.5-gigawatt limit the government established to support sustainable growth, the Bonn-based regulator said Aug. 31 in an email.

Guaranteed subsidies for operational onshore wind plants will be cut 2.4 percent from Jan. 1, with payments starting at 7.49 euro cents (9 cents) a kilowatt-hour for new plants and 4.17 cents a kilowatt-hour for older plants, Bnetza said.

Should new wind or utility-scale solar additions fall below targets, subsidies would rise, according to the rules.

©2017 Bloomberg L.P. All rights reserved. Used with permission

Brazil Judge Reinstates Ban on Mining in Copper-Rich Amazon Area

Posted August 31, 2017, 12:10 P.M. ET

By Michael Kepp

A federal judge in Brazil suspended a presidential decree that had reopened the gold-and-copper-rich eastern Amazon to mining.

President Michel Temer exceeded his authority in issuing the decree on the National Reserve of Copper and Associated Minerals (RENCA) because lifting the ban on mining requires a law that Congress must pass, Judge Rolando Valcir Spanholo of the Twenty-First Regional Federal Court in Brasilia said in his Aug. 29 ruling.

"The suspension of President Temer's unilateral decree with its severe threats to vast Amazonian forest offers a welcome and temporary reprieve," said Christian Poirier, program director for Amazon Watch. "Today's ruling upholds constitutional guarantees and puts the brakes on this drastic regression, but is ultimately vulnerable to being overruled by higher

courts."

Temer's Aug. 22 <u>decree</u> lifted the ban on mining in RENCA, which spans a 17,930-square-mile (46,450-square kilometer) expanse of the eastern Amazon in Amapa and Para states. In 1984 the government set up RENCA, an area larger than Denmark, to temporarily suspend exploration for, and extraction of, copper and other ores there to allow it to extract the minerals at a future date. Subsequent governments had maintained the ban.

"The judge's decision to suspend the decree makes no sense because if a 1984 presidential decree created RENCA, a 2017 presidential decree can end it," Elmer Prata Salomao, president of the advisory council of the Brazilian Association of Mining Research Companies, whose members are major domestic and foreign private-sector mining companies, told Bloomberg BNA Aug. 30.

The judge's decision to reinstate the ban is provisional and his definitive ruling on the merits of the case could take at least six months to decide, Claudia Franco, an assistant to Valcir Spanholo, told Bloomberg BNA.

Temer's legal office will challenge the decision with either in the court where the decision was issued or in a federal appeals court, a spokesman for his legal office told Bloomberg BNA Aug. 31.

Brazil Plans to Offer Up to 9 Gigawatts in Energy Auctions

Posted August 31, 2017, 8:49 A.M. ET

By Vanessa Dezem

Brazil is planning to award contracts for as much as 9 gigawatts of new generating capacity in a pair of power auctions scheduled for December, according to a person with knowledge of the process. The bulk is expected to go to wind farms.

The first event will feature contracts for 1.4 gigawatts to 2 gigawatts of capacity, and the second event will be bigger, with developers bidding for 5 gigawatts to 7 gigawatts, according to the person, who asked not to be identified because the information isn't public.

The scale of the two auctions will be welcome news to renewable energy developers and suppliers. Last December, the government canceled what would have been the year's only auction solely for wind and solar energy, and hasn't held any since. Companies seeking to build power plants have been hobbled by the lack of details regarding future demand, while turbine companies faced the prospect of halting production lines after their current crop of orders dries up.

The auctions this December will offer contracts to sell power from new plants that go into operation in 2021 and 2023. The first will be open only to renewable energy projects, and the other will accept bids from both clean and conventional sources. Power distributors in Brazil are expected to provide more details soon about the amount of capacity they expect to need, according to the person.

The decision to cancel last year's auction resulted from a growing electricity surplus as Brazil grappled with the worst recession in a century. With the economy now starting to improve, the government expects energy demand to increase next year, driving demand for power plants, according to Paulo Pedrosa, executive secretary for the Ministry of Mines and Energy.

Two new auctions are also scheduled for 2018, with one penciled in for the start of the year, according to Pedrosa.

©2017 Bloomberg L.P. All rights reserved. Used with permission

Australia's Digital Currency Opens Avenues for Renewables Trading

Posted August 31, 2017, 03:11 P.M. ET

By Murray Griffin

An Australian company developed a digital currency designed for peer-to-peer trading among businesses and homeowners looking to sell surplus renewable energy.

Power Ledger's decentralized trading platform relies on its own version of bitcoin blockchain technology to instantaneously track transactions, making it possible for them to trade clean energy without the need for accountants, lawyers, or banks.

The blockchain encrypts, replicates, and shares multiple transaction records across a network of participants.

Power Ledger said a key benefit of its platform is that participating small and midsize businesses and homes with rooftop solar photovoltaic systems in Australia will no longer have to sell excess power back to electricity retailers at the low prices they offer.

The penetration rate for rooftop PV systems in Australia is now among the world's highest, according to the Australian Energy Regulator. While state governments are phasing out premium feed-in tariffs, the loss of these incentives is being largely offset by declining installation costs for solar systems, the regulator said.

Those using the peer-to-peer platform instead can sell their excess power to businesses or households prepared to buy it possibly at a higher price. The buyers also benefit because they still pay less than they would if they were purchasing from an electricity retailer. A \$25,000 cap discourages large businesses and utilities from controlling the market.

Expanding Market

It's a large potential market, given Australia has more than 1.7 million small-scale solar PV systems on the rooftops of small businesses and homes, and there is a fast-growing number of slightly larger systems installed on commercial and industrial buildings, according to the federal Clean Energy Regulator.

The Power Ledger platform can accommodate various forms of peer-to-peer renewable energy trading, company co-founder and chairwoman Jemma Green told Bloomberg BNA by phone.

In addition to allowing trading among apartment block occupants or industrial park tenants that all use power behind the same main meter, developers of projects such as community solar farms could use it to secure funding, she said Aug. 28.

Developers "could sell shares in their solar farm via the platform," with the shareholders then receiving some of the income from the project. Power Ledger would in turn charge the developer a fee based on "a percentage of the capex [capital expenditure] of the project," she said.

For households, the digital currency enables owners to sell their excess energy, much in the same way Uber and AirBnb lets people make money from their cars and spare guestrooms.

Larger Networks

If partnerships are forged with electricity distribution businesses, then trading also could occur across larger electricity networks, according to Green.

The company already is testing its trading platform at a new housing development in the Western Australian city of Perth. Green said residents were paying at least 20 percent less for power than if they were buying it from the grid.

Power Ledger is currently piloting the platform in conjunction with New Zealand's largest electricity distributor, Vector Ltd. "Vector is looking at the potential for blockchain technology in peer-to-peer energy trading, and has been working since the start of the year with PowerLedger on a trial," said a Vector spokesman, adding that it's too early to comment on the trial.

It's also in discussions with Western Power, the distribution business owned by the Western Australian state government, regarding a trial that would involve some of the 11,000 homes—as well as TasNetworks, the electricity distribution network owned by the Tasmanian state government—Power Ledger managing director David Martin told Bloomberg BNA by phone Aug. 28.

In addition, discussions are underway with a large distribution business in the U.S. and another in Japan, although Green said neither could be named at this stage for reasons of commercial confidentiality.

The company started selling 100 million tokens that give those holding them rights to use its trading platform Aug. 27 and by Aug. 30 more than 90 percent had been sold at a fixed price of 8.8 cents.

Disruption?

Power Ledger has created 1 billion tokens and a follow offering will take place in September at an uncapped price.

Meanwhile, the federal government's Australian Renewable Energy Agency (ARENA) has separately been looking into using blockchain to enable peer-to-peer trading in renewable energy among businesses and households.

In May this year it contributed A\$120,000 (\$95,000) to an A\$293,000 desktop trial by AGL Energy, one of Australia's largest electricity businesses.

"Australia has experienced a rooftop solar boom in the past decade and we are expecting a residential battery boom to follow in the coming years," ARENA chief executive Ivor Frischknecht said. "Ultimately, these investigations are about getting the most value out of solar and battery systems through a more flexible and modern marketplace."

A report on the findings of the ARENA-funded study is expected to be released soon.

Japan Environment Ministry Asks for \$2.9B to Boost Clean Energy

Posted August 31, 2017, 9:16 A.M. ET

By Chisaki Watanabe

Japan's Ministry of Economy, Trade and Industry is seeking to allocate 323 billion yen (\$2.9

billion) to expand the use of low-carbon energy sources for the year starting April 1, an increase of nearly 7 percent from the previous year.

The plan includes support for research and development for more efficient solar panels such as perovskite cells and cheaper floating offshore wind, according to a ministry document released on Aug. 31. The allocation will also be used to increase installations of hydrogen fuel cells and hydrogen stations for vehicles.

The ministry is increasing support for next-generation vehicles and self-driving technology by 31 percent to 45 billion yen, including 4.8 billion yen for the development of next-generation batteries, including solid-state lithium-ion batteries.

The ministry is also planning to set aside 78 billion yen to promote energy savings in factories, office buildings and homes with more energy-efficient light bulbs and insulating materials. That's up from 72 billion yen a year ago.

--With assistance from Tsuyoshi Inajima.

©2017 Bloomberg L.P. All rights reserved. Used with permission

China's Ex-Im Bank Backs Azerbaijan Wind With \$460 Million Loan

Posted August 31, 2017, 9:05 A.M. ET

By Zulfugar Agayev

The Export-Import Bank of China will finance a 500 million-euro (\$460 million) wind farm in the Caspian Sea off the coast of Azerbaijan as the third-biggest crude oil producer in the former Soviet Union taps clean energy to supply its domestic energy needs.

The Azeri government is working with the state-owned China Power Engineering Consulting Group Co., or CPECGC, which will build 40 to 60 wind turbines between the Caspian Sea islands of Pirallahi and Cilov, according to Camil Malikov, deputy head of the State Agency for Alternative and Renewable Energy Sources.

CPECGC agreed to finance the feasibility study of the project, which may be approved by the government in late January or early February, he said.

"The Export-Import Bank of China together with other Chinese state lenders will provide 90 percent to 95 percent of the funding," Malikov said in an interview in Baku, noting project costs will be about 450 million euros to 500 million euros in total. "The remaining part will be covered by the Azeri government."

'City of Winds'

CPECGC will conduct engineering, procurement and construction of the project together with domestic companies should the government approve the feasibility plan. The 200-megawatt project would provide enough power for 500,000 homes, he said.

"We'll operate the wind park and repay the debt within 12 to 15 years," Malikov said.

Azerbaijan seeks to substitute more clean energy for fossil fuel, which contributed 34 percent of gross domestic product and 43 percent of state budget revenues last year, according to Sberbank CIB. Oil production fell 8.9 percent in the first seven months of 2017 from the same period a year ago, and marketable natural gas output dropped 1.3 percent, according to a State

Statistics Committee report on Aug. 15.

Azerbaijan's oil production is likely to drop another 20 percent from the current levels by 2025, according to the Organization of Petroleum Exporting Countries.

Wind farms are attractive to investors because of the strength of breezes in Baku and the Absheron Peninsula, Malikov said. Wind blows more than 270 days in Baku, which means "city of winds" in Persian, according to estimates from the Geography Institute of Azerbaijan's Academy of Sciences.

Hybrid Stations

The government also is working with Germany's KfW development bank to build two hybrid power stations in the Qaradag and Xizi districts west and northwest of the capital, Malikov said.

German experts are drawing up a feasibility plan for the projects, which will generate a combined 140 megawatts of wind and solar energy. That will include 120 megawatts of wind and 40 megawatts of solar energy. Those projects may cost about 200 million euros, Malikov said, adding that state guarantees would be required to secure financing from the German lender.

Azerbaijan currently generates 1,500 megawatts—or 10 percent of its annual electricity production, from clean sources—Malikov said. That includes 1,100 megawatts to 1,200 megawatts from hydroelectric dams, 60 megawatts from wind and 50 megawatts from solar farms.

The plan is to increase electricity production from renewable sources by 420 megawatts by 2020.

"By 2025, we'll be generating 20 percent of our electricity from clean sources," Malikov said.

©2017 Bloomberg L.P. All rights reserved. Used with permission

Privacy Policy | Terms of Service | Manage Your Email | Contact Us

1801 South Bell Street, Arlington, VA 22202 Copyright © 2017 The Bureau of National Affairs, Inc.

Daily Environment Report for EPA